



# results of BLAST

BLASTN 2.2.13 [Nov-27-2005]

RID: 1136323491-6647-194999334383.BLASTQ1

Database: ref\_contig

3315 sequences; 2,411,399,953 total letters

If you have any problems or questions with the results of this search  
please refer to the [BLAST FAQs](#)

[Taxonomy reports](#)

Genome View

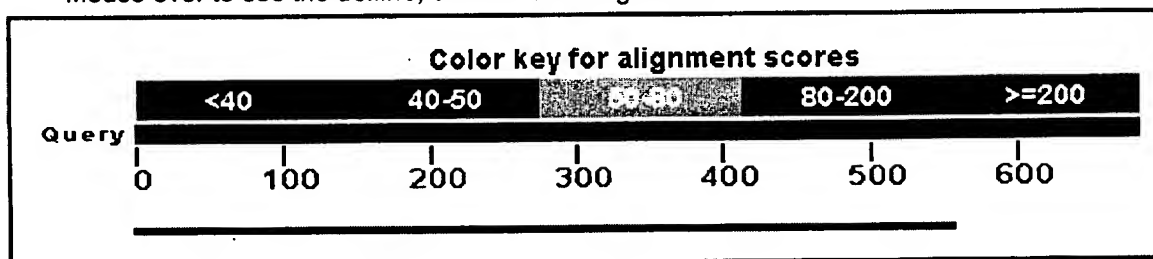
Show positions of the BLAST hits in the dog  
genome using the Entrez Genomes MapViewer

Query=

(680 letters)

## Distribution of 1 Blast Hits on the Query Sequence

Mouse over to see the define, click to show alignments



Sequences producing significant alignments:

Score E  
(Bits) Value

ref|NW\_879562.1|CfaX\_WGA86\_2 Canis familiaris chromosome X genom 362 2e-97

### Alignments

>ref|NW\_879562.1|CfaX\_WGA86\_2 **D** Canis familiaris chromosome X genomic contig  
Length=48572774

Features in this part of subject sequence:

similar to Rho-GTPase-activating protein 6 (Rho-type GTPa...

Score = 362 bits (188), Expect = 2e-97

Identities = 461/583 (79%), Gaps = 57/583 (9%)

Strand=Plus/Plus

```

Query 1      ATGGGGACCTGGATTTTGTTCCTGCCTCCTGGGAGCAGCCTTCAG-TATGCCTGTGAG 59
          |||
Sbjct 7684216 ATGGGGACCTGGATTTTGTTCCTGCCTCCTGGGAGCAGCCTTT-GCTATGCCCGTGAG 768427

Query 60     TAAAATTTCC----A-A-T-TTCCAATTTCAAGCTTGGAATAAAAATCTGCCTCAGA 112
          |||
Sbjct 7684275 TAAAATACCCCTGCATAATATTC-AATTTCAAGCTTGGAATAAAAAGTCTGCCCCACA 768433

Query 113    TTTTATTAGGGTTAAA-TTAAAGGGTTAAGACAGTACAAGATCTGATGTTCAAAAT 171
          |||
Sbjct 7684334 GTT-----GG-T-AACTTTA-GGGTTAAGACAGTACAAGATCAGATGTCCTCAAAT 768438

Query 172    GTGACTGTGTTTAAAGAAACATTTTAAATCTTGATCACAAGATTTTAAACAAAAACAT 231
          |||
Sbjct 7684384 GTCTCTGTGTTTAAAGAAACACTTGGAAGAGCTTGTT-ATAA-A----AAAA-AATAT-AT 768443

Query 232    TCTCAGTTGCCTTCACCCATATTCTGATTAGCCAG-AGTGGGGGGTGTGCTGAG 290
          |||
Sbjct 7684436 TCCCAGATGCCTCCACCCA-AGACTGATTAGTAGAGC-AGGAGTGGGGGAGTGCCAG 768449

Query 291    AACTCTGAATTTTAAACAAGCAAGCAAGCTCAGGAAATCT-TGGAAACAATTA-CTTATAA 348
          |||
Sbjct 7684494 GACTCTGCATTTTAAACAAGCA---CCTCAGGAGATTCTGTGGAGACAATTAAGTTGTA 768454

Query 349    -T--CA-CTC--ATCTCTAGATGGA--AAATTTTGAAGGGACCTTTGAAAGGCCTCCA 400
          |||
Sbjct 7684550 ATATCATCGCCCATCTCTAGATGGAGGAACTTTTAGAAGGGACCCTTGAAAGGCCTCCA 768460

Query 401    GAAAAAGTGCTC-AATCAGTCTTT--AAGTACTACAAAATGCCAGTTTCTCTAAAAC 456
          |||
Sbjct 7684610 GAGAAAGTGCTCGAA-CAG-CTTAGGCAAATACTACAAAATGCCAATTTCTCTAAAAC 768466

Query 457    CAAATTTCTCACAAGTATCTAACTCTCTTCTGCTCAGAAAACCCC-CGGGCTATCATTC 515
          |||
Sbjct 7684668 CCAATTTCTAACGAGTGTCCAAGTCTCTTCTGCCCTCCAACTCTACTG-CTGTTAC-C 768472

Query 516    TTCAGAG--TAAGATTTAGTGTAGGAATTTCTTCTTGAAC 556
          |||
Sbjct 7684726 GTCGGAGGGTAAGATCTCTGTGTAGGAATTTCTTCTTGAAC 7684768

```

Database: dog build 2 genome database (reference assembly only)

Posted date: Sep 2, 2005 10:11 AM

Number of letters in database: -1,883,567,339

Number of sequences in database: 3,315

Lambda      K      H  
 1.33      0.621      1.12

Gapped  
 Lambda      K      H  
 1.33      0.621      1.12

Matrix: blastn matrix:1 -2

Gap Penalties: Existence: 0, Extension: 0

Number of Sequences: 3315

Number of Hits to DB: 7542

Number of extensions: 0

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Number of successful extensions: 0  
Number of sequences better than 0.01: 0  
Number of HSP's better than 0.01 without gapping: 0  
Number of HSP's gapped: 0  
Number of HSP's successfully gapped: 0  
Number of extra gapped extensions for HSPs above 0.01: 0  
Length of query: 680  
Length of database: 2411399953  
Length adjustment: 29  
Effective length of query: 651  
Effective length of database: 2411303818  
Effective search space: 1569758785518  
Effective search space used: 1569758785518  
A: 0  
X1: 18 (34.6 bits)  
X2: 32 (59.1 bits)  
X3: 27 (49.9 bits)  
S1: 18 (34.4 bits)  
S2: 25 (47.3 bits)

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125037 Total Canines with Gender tests

Count(\*) Breeds

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170	- not provided -
60	Affenpinscher
148	Afghan Hound
254	Airedale Terrier
2	Akbash Dog
311	Akita
261	Alaskan Klee Kai
312	Alaskan Malamute
2	Ambor
253	American Black & Tan Coonhound
39	American Bulldog
140	American Eskimo
8	American Foxhound
55	American Hairless Terrier
1160	American Pit Bull Terrier
232	American Staffordshire Terrier
13	American Water Spaniel
1	American Wolfdog
30	Anatolian Shepherd
4	Argentine Dogo
174	Australian Cattle Dog
971	Australian Shepherd
100	Australian Terrier
200	Basenji
965	Basset Hound
2841	Beagle
82	Bearded Collie
2	Beauceron
48	Bedlington Terrier
73	Belgian Malinois
81	Belgian Sheepdog
107	Belgian Tervuren
15	Bergamasco
748	Bernese Mountain Dog
1658	Bichon Frise
4	Black Mouth Cur
19	Black Russian Terrier
540	Black and Tan Coonhound
228	Bloodhound
613	Bluetick Coonhound
1	Bolognese
305	Border Collie
255	Border Terrier
272	Borzoi
1983	Boston Terrier
162	Bouvier des Flandres
2382	Boxer
40	Boykin Spaniel
15	Bràque du Bourbonnais

75	Briard
771	Brittany Spaniel
426	Brussels Griffon
172	Bull Terrier
1946	Bulldog
372	Bullmastiff
474	Crosses
712	Cairn Terrier
28	Canaan Dog
7	Cane Corso
142	Cardigan Welsh Corgi
2542	Cavalier King Charles Spaniel
242	Chesapeake Bay Retriever
4274	Chihuahua
437	Chinese Crested
680	Chinese Shar-Pei
191	Chinook
239	Chow Chow
39	Clumber Spaniel
2474	Cocker Spaniel
591	Collie
132	Coton de Tulear
36	Curly-Coated Retriever
5932	Dachshund
164	Dalmatian
9	Dandie Dinmont Terrier
784	Doberman Pinscher
2	Dogo Argentino
89	Dogue de Bordeaux
728	General English dogs
201	English Coonhound
10	English Foxhound
4	English Pointer
589	English Setter
1	English Shepherd
788	English Springer Spaniel
57	English Toy Spaniel
33	Entlebucher
3	Epagneul Breton
21	Field Spaniel
7	Fila Brasileiro
16	Finnish Lapphund
14	Finnish Spitz
136	Flat-Coated Retriever
2	Fox Terrier
667	French Bulldog
14	German Drahthaar
1	German Longhaired Pointer
3409	German Shepherd Dog
2401	German Shorthaired Pointer
1	German Spaniel
1	German Spitz

116	German Wirehaired Pointer
96	Giant Schnauzer
6	Glen of Imaal Terrier
3542	Golden Retriever
155	Gordon Setter
977	Great Dane
225	Great Pyrenees
147	Greater Swiss Mountain Dog
59	Greyhound
9	Harrier
670	Havanese
5	Hound
35	Ibizan Hound
4	Icelandic Sheepdog
4	Irish Red & White Setter
417	Irish Setter
49	Irish Terrier
28	Irish Water Spaniel
190	Irish Wolfhound
470	Italian Greyhound
258	Jack Russell Terrier
334	Japanese Chin
14	Kai
2	Karelian Bear Dog
127	Keeshond
1	Kemmer Cur
64	Kerry Blue Terrier
26	Komondor
50	Kuvasz
52	La Catahoula Leopard Dog
7776	Labrador Retriever
33	Lakeland Terrier
1	Lancashire Heeler
1	Large Munsterlander
10	Leonburger
3	Leopard Cur
598	Lhasa Apso
496	Llewellyn Setter
39	Lowchen
2671	Maltese
93	Manchester Terrier
759	Mastiff
1	Matthes Lionhound
246	Mi-Ki
30	Miniature Bull Terrier
1722	Miniature Pinscher
2678	Miniature Schnauzer
18	Mountain Cur
2	NORTHERN TIMBER
83	Neopolitan Mastiff
506	Newfoundland
80	Norfolk Terrier

2	Norsk Buhund
133	Norwegian Elkhound
3	Lundehund
116	Norwich Terrier
73	Nova Scotia Duck Tolling Retriever
169	Old English Sheepdog
2	Olde English Bulldogge
16	Otterhound
1447	Papillon
575	Pekingese
1139	Pembroke Welsh Corgi
14	Perro De Persa Canario
1	Peruvian Inca Orchid
67	Petit Basset Griffon Vendeen
29	Pharaoh Hound
119	Plott Coonhound
2547	Pointer
15	Polish Lowland Sheepdog
3828	Pomeranian
4951	Poodle
311	Portuguese Water Dog
7	Pudelpointer
2851	Pug
31	Puli
11	Pumi
2	Pyrenean Shepherd
166	Rat Terrier
337	Redbone Coonhound
333	Rhodesian Ridgeback
1106	Rottweiler
18	Russell Terrier
103	Saluki
255	Samoyed
213	Schipperke
1	Schnoodle
52	Scottish Deerhound
477	Scottish Terrier
9	Sealyham Terrier
1793	Shetland Sheepdog
330	Shiba Inu
4286	Shih Tzu
1078	Siberian Husky
102	Silken Windhound
301	Silky Terrier
42	Skye Terrier
4	Sloughi
7	Small Munsterlander
98	Smooth Fox Terrier
419	Soft Coated Wheaten Terrier
6	Spanish Water Dog
45	Spinone Italiano
416	St Bernard

121	Staffordshire Bull Terrier
13	Standard Poodle
65	Standard Schnauzer
31	Sussex Spaniel
5	Swedish Vallhund
23	Tibetan Mastiff
118	Tibetan Spaniel
142	Tibetan Terrier
140	Toy Fox Terrier
1	Toy Poodle
6	Treeing Cur
1	Treeing Feist
6464	Treeing Walker
7	Treeing Walker Coonhound
736	Vizsla
721	Weimaraner
35	Welsh Springer Spaniel
168	Welsh Terrier
1077	West Highland White Terrier
214	Whippet
3	White Shepherd
153	Wirehaired Fox Terrier
40	Wirehaired Pointing Griffon
6	Wirehaired Vizsla
1	Xoloitzcuintli
6887	Yorkshire Terrier
<b>125037</b>	<b>Samples</b>
<b>231</b>	<b>Breeds</b>
111	X/Y Genotype with Sex of 'F'
1885	X/X Genotype with Sex of 'M'
<b>1996</b>	<b>Total</b>

**1.60% of Tests disagree with Sex code Submitted by Customer**

Test to validate summarization/counting code  
**0 DB ERRORS - Single allele but 'Y' instead of 'X'**